```
Set
         Items Description
            174 (TOLERIZ? OR TOLERANCE OR TOLERANT) (S) (FETAL (3N) THYMUS)
S1
             0 S1 (S) (VECTOR? OR RETROVIR? OR ADENOVIR? OR PLASMID?)
369 (TOLERIZ? OR TOLERANCE OR TOLERANT) (S) FETAL (S) (THYMUS -
$2
S3
            369
              OR THYMOCYTE?)
                  S3 (S) (PLASMID? OR VECTOR? OR RETROVIR? OR ADENOVIR?)
S4
                    RD (unique items)
S5
                   (RECOMBINANT OR TRANSDUC? OR TRANSFECT?) (3N) (FETAL (2N)
S6
              (THYMOCYTE? OR T OR LYMPHOCYTE?))
              7 S6 (S) THYMUS
S7
                   RD (unique items)
S8
             FETAL (W) T (W)LYMPHOCYTE?

O S9 (5N) (TRANSFECT? OR TRANSDUC? OR PLASMID? OR VECTOR? OR
S9
$10
              RETROVIR? OR ADENOVIR?)
             32 S9 NOT PY>1999
S11
                   RD (unique items)
S12
             11
            11 RD (unique items)
145 INTRATHYMIC (S) (RETROVIR? OR PLASMID? OR VECTOR? OR ADENO-
S13
               VIR?)
             30 S13 (S) (TOLERANCE OR TOLERIZ? OR TOLERANT)
10 RD (unique items)
S14
?s (fetal (3n) thymocyte?) (s) (thymus) (s) (retrovir? or adenovir? or plasmid? or vect
or?)
            621200 FETAL
83714 THYMOCYTE?
198787 THYMUS
316308 RETROVIR?
125485 ADENOVIR?
340447 PLASMID?
544996 VECTOR?
2 (FETAL (3N) THYMOCYTE?) (S) (THYMUS) (S) (RETROVIR? OR ADENOVIR? OR PLASMID? OR VECTOR?)
                      ADENOVIR? OR PLASMID? OR VECTOR?)
?rd
...completed examining records
           1 RD (unique items)
```

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Human umbilical cord blood (UCB) Mematopoietic stem cells (HSC) receive increased attention as a possible target for gene-transfer in gene therapy trials. Diseases affecting the lymphoid lineage, as adenosine deaminase (ADA) deficiency and acquired immunodeficiency syndrome (AIDS) could be cured by gene therapy. However, the T-cell progenitor potential of these HSC after gene-transfer is largely unknown and was up to now not testable in vitro. We show here that highly purified CD34sup +sup + Lineage marker-negative (CD34sup +sup +Linsup -) UCB cells generate T, natural killer (NK), and dendritic cells in severe combined immunodeficient mouse fetal thymus organ culture (FTOC). CD34sup +sup +Linsup - and CD34sup +sup +CD38sup -Linsup - UCB cells express the retroviral encoded marker gene Green Fluorescent Protein (GFP) after in vitro transduction with MFG-GFP retroviral supernatant. Transduced cells were still capable of generating T, NK, and dendritic cells in the FTOC, all expressing high levels of GFP under control of the Moloney murine leukemia virus (MoMuLV) long terminal repeat promotor. We thus present an in vitro assay for thymic T-cell development out of transduced UCB HSC, using GFP as a marker gene.

?S11	770	FTOC OR (FETAL (W) THYMUS (W) ORGAN (W) CULTURE?)
S12	54	S11 (S) (RETROVIR? OR ADENOVIR? OR PLASMID? OR VECTOR?)
S13	32	S12 NOT PY>1999
Sl4	27	S13 NOT (S10 OR S7)
S15	11	RD (unique items)